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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/558,233	04/26/2000	Mark S. Ortiz	3001-0039	9714

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EXAMINER

RAO, SHEELA S

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/558,233

Applicant(s)

ORTIZ ET AL.

Examiner

Sheela Rao

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5-9.                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-26 are presented for examination.
2. Applicant's submission of references on form PTO-1449 has been considered. A signed copy of each form submitted is attached.

***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed features regarding the second path, second active elements, the controller for controlling the second active element, second carriage, and second tool must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

4. Applicant has incorporated by reference five (5) co-pending applications, at page 27 of the specification. Examiner notes that incorporation by reference of an application in a printed United States patent constitutes a special circumstance under 35 U.S.C. § 122 warranting that access of the original disclosure of the application be granted. The incorporation by reference will be interpreted as a waiver of confidentiality of only the original disclosure as filed, and not the entire application file, *In re Gallo*, 231 USPQ 496 (Comm'r Pat. 1986). If Applicant objects to access to the entire application file, two copies of the information incorporated by reference must be submitted along with the objection. Failure to provide the material within the period provided will result in the entire application (including prosecution) being made available to petitioner. The Office will not attempt to separate the noted materials from the remainder of the application. Compare *In re Marsh Engineering Co.*, 1913 C.D. 183 (Comm'r Pat. 1913).

5. Applicant is requested to update the serial number and status information with regard to the co-pending applications incorporated by reference.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 7-15, 18-20, and 24-26 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The features of the claimed invention with regard to the "second" devices of the instant invention have not been enabled. Claims 7-15 are directed to a second path, second carriages, second active elements, the control of these second active elements, and a second tool. Claims 18-20 further define the second path; while claims 24-26 are directed to the method of operation of the system of the previous claims. The limitations of the aforementioned claims are not described as to their enablement within the instant invention. Claim 7 goes on to limit the instant invention wherein the "first tool associated with each first carriage cooperates with the second carriage to perform the manufacturing operation", the use of the first tool to cooperate between the first and second carriage is not explained nor shown. Furthermore, the use of a second tool as introduced in claim 10 is also not explained nor shown in the figures. In short, claims 7-15, 18-20, and 24-26 have not been enabled.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation of "a first tool associated with each first carriage ..." as stated in instant claim 1 is not clearly defined as to how applicant defines "associated". Is the "first tool" within the carriage or located nearby to the carriage in its path of transport. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-6, 16-17, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brian (USPN 4,005,349) in view of Prucher (USPN 4,633,148).

Brian teaches of a control system for a work-handling apparatus within a manufacturing environment. The conveying apparatus utilizes independent movable carriages along an aligned series. The patented invention discloses the work carriages as being mounted on rails or tracks that extend along a series of treating stations.

The limitations of the instant invention are taught by the reference of prior art with regard to claim 1 by the use of the independent movable carriages, a plurality of active elements to produce movement, a controller for controlling the activation of the elements, and a tool for performing the manufacturing operation as taught in column 9: lines 59, et seq. The tool as used by Brian is taught to be an electrochemical plating apparatus, see column 10: line 20.

Brian teaches the path of the carriages within the conveyor apparatus to be fixed but does not specify the path to be curvilinear, as per claim 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a curvilinear path so as to enable a more efficient and flexible transport means.

The association of a "first reactive element" with each of the carriages as in instant claim 3 is shown by the patented invention by driving each of the carriages with a horizontal drive motor, see column 10: lines 65-68.

The motion parameters of instant claim 4 to be one of force, acceleration, velocity, direction, position, torque, or jerk, is taught to be position, direction, and acceleration among others in the system of the patented invention. See column 10: lines 56-58.

The composition of the first active elements being electrically conductive coils to establish electromagnetic field for production of movement provided by linear motors is not taught or suggested by the patented invention to Brian. However, the reference of prior art to Prucher teaches the use of a system that employs a plurality of linear induction motors positioned along a track. The track as used by Prucher carries a plurality of carriers or carriages. As a carrier or carriage passes along the track, a reaction plate or reactive element that is affixed to the carrier passes over the stators of the linear induction motors. The interaction between the plate and the electromagnetic field generated within the motors results in a thrust that propels the carrier along the track. Thereby, satisfying the limitations of instant claim 5. See column 3: lines 30-55. As per the limitations of instant claim 6, wherein the controller is set to control the enablement of the coils as a function of the location of each carriage so that each carriage is independently controlled, Prucher teaches this by positioning the motors to provide continuous electromagnetic contact with the reaction plate or reactive element. As the carrier or carriage leaves the command of one linear motor, it enters the charge of a subsequent motor.

With regard to the use of a multiplexer as per instant claim 16, see figures 5, 6, 7, and 40 of the Brian reference wherein switches are depicted as used.

Brian teaches the independent movement of the carriages as in instant claim 17 as stated above with regard to instant claim 1. See column 9: line 59.

The limitations of instant claims 21-23 are rejected under the same basis as set forth above with regard to claims 1-4. Claims 21-23 claim the method used for the system of claims 1-4.

For the reasons stated above, the limitations of the claimed invention is taught by the prior arts of record; thereby, rendering the instant claims unpatentable.

**Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela Rao whose telephone number is (703) 305-9766. The examiner can normally be reached Tuesday - Thursday from 9:00 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on (703) 308-0538.

Any response to this action should be mailed to:

**Commissioner of Patents and Trademarks  
Washington, D.C. 20231**

or faxed to:


**(703) 746-7238 for After-Final Communications**

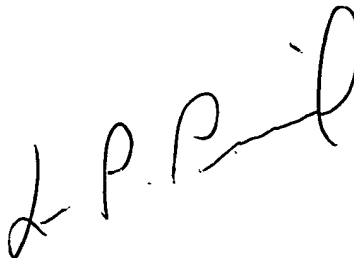
**(703) 746-7239 for Official Communications**

**(703) 746-7240 for Status Inquiries of Draft  
Communications**

**Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

  
Sheela S. Rao  
February 5, 2003



**LEO PICARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**